

[4910-13-U]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39 [66 FR 20387 4/23/2001]

[Docket No. 2001-NM-73-AD; Amendment 39-12180; AD 2001-08-03]

RIN 2120-AA64

Airworthiness Directives; Boeing Model 777-200 Series Airplanes

AGENCY: Federal Aviation Administration, DOT.

ACTION: Final rule; request for comments.

SUMMARY: This amendment adopts a new airworthiness directive (AD) that is applicable to certain Boeing Model 777-200 series airplanes. This action requires repetitive inspections of the upper housing assembly of the forward trunnion of the main landing gear (MLG) for discrepancies (migrated or missing wearplates, loose or fractured attachment screws); and corrective action, if necessary. This action also provides for an optional modification of the upper housing assembly for airplanes without discrepant wearplates, which would end the repetitive inspections. This action is necessary to prevent migration or loss of the upper housing wearplate, which could result in loss of the MLG during the takeoff roll; consequent damage to the airplane structure; and injury to flight crew, passengers, or ground personnel. This action is intended to address the identified unsafe condition.

DATES: Effective May 8, 2001.

The incorporation by reference of certain publications listed in the regulations is approved by the Director of the Federal Register as of May 8, 2001.

Comments for inclusion in the Rules Docket must be received on or before June 22, 2001.

ADDRESSES: Submit comments in triplicate to the Federal Aviation Administration (FAA), Transport Airplane Directorate, ANM-114, Attention: Rules Docket No. 2001-NM-73-AD, 1601 Lind Avenue, SW., Renton, Washington 98055-4056. Comments may be inspected at this location between 9:00 a.m. and 3:00 p.m., Monday through Friday, except Federal holidays. Comments may be submitted via fax to (425) 227-1232. Comments may also be sent via the Internet using the following address: 9-anm-iarcomment@faa.gov. Comments sent via fax or the Internet must contain "Docket No. 2001-NM-73-AD" in the subject line and need not be submitted in triplicate. Comments sent via the Internet as attached electronic files must be formatted in Microsoft Word 97 for Windows or ASCII text.

The service information referenced in this AD may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. This information may be examined at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC. **FOR FURTHER INFORMATION CONTACT:** Stan Wood, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2772; fax (425) 227-1181.

SUPPLEMENTARY INFORMATION: The FAA has received a report indicating that, during fatigue testing of a Boeing Model 777-200 series airplane, a wearplate of the upper housing assembly of the forward trunnion of the main landing gear (MLG) was found to have migrated, and the attachment screws were fractured. The airplane had accumulated approximately 32,000 flight cycles.

Subsequent to that report, one operator reported finding loose or fractured attachment screws of the wearplate on three Model 777-200 series airplanes. The wearplate had not migrated on any of those airplanes. The airplanes had accumulated approximately 4,300 to 4,500 flight cycles, and 20,700 to 22,690 flight hours. Loose or fractured attachment screws could lead to migration or loss of the upper housing wearplate, which could result in loss of the MLG during the takeoff roll; consequent damage to the airplane structure; and injury to flight crew, passengers, or ground personnel.

Explanation of Relevant Service Information

The FAA has reviewed and approved Boeing Alert Service Bulletin 777-57A0011, Revision 1, dated January 25, 2001, which describes procedures for repetitive inspections of the upper housing assembly of the forward trunnion of the MLG for discrepancies (migrated or missing wearplates, loose or fractured attachment screws), and corrective action (modification) if any discrepancies are found. The modification includes, but is not limited to, replacement of the lower housing fuse pins if the wearplates are fully migrated or missing; replacement of the upper and lower housing assemblies, and replacement of the wearplate if missing or damaged. Doing the modification eliminates the need for the repetitive inspections. The service bulletin references certain Boeing 777 Airplane Maintenance Manuals as the appropriate sources for accomplishment of the modification. Accomplishment of the actions specified in the service bulletin is intended to adequately address the identified unsafe condition.

Explanation of the Requirements of the Rule

Since an unsafe condition has been identified that is likely to exist or develop on other Model 777-200 series airplanes of the same type design, this AD is being issued to prevent migration or loss of the upper housing wearplate, which could result in loss of the MLG during takeoff roll; consequent damage to the airplane structure; and injury to flight crew, passengers, or ground personnel. This AD requires repetitive inspections of the upper housing assembly of the forward trunnion of the MLG for discrepancies (migrated or missing wearplates, loose or fractured attachment screws); and corrective action, if necessary. This AD also provides for an optional modification of the upper housing assembly for airplanes without discrepant wearplates, which would end the repetitive inspections. The actions are required to be accomplished per the service bulletin described previously, except as discussed below.

Difference between Alert Service Bulletin and this AD

Although the service bulletin specifies accomplishment of inspections, the FAA finds that “detailed visual inspection” is the appropriate terminology for the inspections described in the service bulletin. A definition of a detailed visual inspection is included in Note 2 of this AD.

Interim Action

This is interim action. The service bulletin recommends doing the modification of the upper housing assembly of the forward trunnion within 6 years since date of delivery of the airplane or within 24 months after the date of the service bulletin, whichever is later. This AD provides for the modification as optional. The FAA is currently considering requiring the modification, which is described in the service bulletin and which would end the repetitive inspections required by this AD action. However, the planned compliance time for the replacement is sufficiently long so that notice and opportunity for prior public comment will be practicable.

Determination of Rule's Effective Date

Since a situation exists that requires the immediate adoption of this regulation, it is found that notice and opportunity for prior public comment hereon are impracticable, and that good cause exists for making this amendment effective in less than 30 days.

Comments Invited

Although this action is in the form of a final rule that involves requirements affecting flight safety and, thus, was not preceded by notice and an opportunity for public comment, comments are invited on this rule. Interested persons are invited to comment on this rule by submitting such written data, views, or arguments as they may desire. Communications shall identify the Rules Docket number and be submitted in triplicate to the address specified under the caption “ADDRESSES.” All communications received on or before the closing date for comments will be considered, and this rule

may be amended in light of the comments received. Factual information that supports the commenter's ideas and suggestions is extremely helpful in evaluating the effectiveness of the AD action and determining whether additional rulemaking action would be needed.

Submit comments using the following format:

- Organize comments issue-by-issue. For example, discuss a request to change the compliance time and a request to change the service bulletin reference as two separate issues.
- For each issue, state what specific change to the AD is being requested.
- Include justification (e.g., reasons or data) for each request.

Comments are specifically invited on the overall regulatory, economic, environmental, and energy aspects of the rule that might suggest a need to modify the rule. All comments submitted will be available, both before and after the closing date for comments, in the Rules Docket for examination by interested persons. A report that summarizes each FAA-public contact concerned with the substance of this AD will be filed in the Rules Docket.

Commenters wishing the FAA to acknowledge receipt of their comments submitted in response to this rule must submit a self-addressed, stamped postcard on which the following statement is made: "Comments to Docket Number 2001-NM-73-AD." The postcard will be date stamped and returned to the commenter.

Regulatory Impact

The regulations adopted herein will not have a substantial direct effect on the States, on the relationship between the national Government and the States, or on the distribution of power and responsibilities among the various levels of government. Therefore, it is determined that this final rule does not have federalism implications under Executive Order 13132.

The FAA has determined that this regulation is an emergency regulation that must be issued immediately to correct an unsafe condition in aircraft, and that it is not a "significant regulatory action" under Executive Order 12866. It has been determined further that this action involves an emergency regulation under DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979). If it is determined that this emergency regulation otherwise would be significant under DOT Regulatory Policies and Procedures, a final regulatory evaluation will be prepared and placed in the Rules Docket. A copy of it, if filed, may be obtained from the Rules Docket at the location provided under the caption "ADDRESSES."

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, pursuant to the authority delegated to me by the Administrator, the Federal Aviation Administration amends part 39 of the Federal Aviation Regulations (14 CFR part 39) as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. Section 39.13 is amended by adding the following new airworthiness directive:

AIRWORTHINESS DIRECTIVE



Aircraft Certification Service
Washington, DC

U.S. Department
of Transportation
**Federal Aviation
Administration**

We post ADs on the internet at "av-info.faa.gov"

The following Airworthiness Directive issued by the Federal Aviation Administration in accordance with the provisions of Title 14 of the Code of Federal Regulations (14 CFR) part 39, applies to an aircraft model of which our records indicate you may be the registered owner. Airworthiness Directives affect aviation safety and are regulations which require immediate attention. You are cautioned that no person may operate an aircraft to which an Airworthiness Directive applies, except in accordance with the requirements of the Airworthiness Directive (reference 14 CFR part 39, subpart 39.3).

2001-08-03 BOEING: Amendment 39-12180. Docket 2001-NM-73-AD.

Applicability: Model 777-200 series airplanes, as listed in Boeing Alert Service Bulletin 777-57A0011, Revision 1, dated January 25, 2001, certificated in any category.

Note 1: This AD applies to each airplane identified in the preceding applicability provision, regardless of whether it has been modified, altered, or repaired in the area subject to the requirements of this AD. For airplanes that have been modified, altered, or repaired so that the performance of the requirements of this AD is affected, the owner/operator must request approval for an alternative method of compliance in accordance with paragraph (c) of this AD. The request should include an assessment of the effect of the modification, alteration, or repair on the unsafe condition addressed by this AD; and, if the unsafe condition has not been eliminated, the request should include specific proposed actions to address it.

Compliance: Required as indicated, unless accomplished previously.

To prevent migration or loss of the wearplate of the upper housing assembly of the forward trunnion of the main landing gear (MLG), which could result in loss of the MLG during the takeoff roll; consequent damage to the airplane structure; and injury to flight crew, passengers, or ground personnel; accomplish the following:

Repetitive Inspections/Corrective Action

(a) Within 50 flight cycles after the effective date of this AD: Do a detailed visual inspection of the upper housing assembly of the forward trunnion of the MLG for discrepancies (migrated or missing wearplates, loose or fractured attachment screws), per Part 1 'Inspection' of the Accomplishment Instructions of Boeing Alert Service Bulletin 777-57A0011, Revision 1, dated January 25, 2001.

Note 2: For the purposes of this AD, a detailed visual inspection is defined as: "An intensive visual examination of a specific structural area, system, installation, or assembly to detect damage, failure, or irregularity. Available lighting is normally supplemented with a direct source of good lighting at intensity deemed appropriate by the inspector. Inspection aids such as mirror, magnifying lenses, etc., may be used. Surface cleaning and elaborate access procedures may be required."

(1) If no wearplate migration or loose or fractured attachment screw is found: Repeat the inspection no later than every 100 flight cycles, until paragraph (b) of this AD has been done.

(2) If loose or fractured attachment screws are found but no wearplate migration is found: Repeat the inspection no later than every 50 flight cycles, until paragraph (b) of this AD has been done.

(3) If the wearplate is partially migrated, before further flight, do the modification specified in paragraph (b) of this AD.

(4) If the wearplate is fully migrated or missing, before further flight, replace the fuse pins of the lower housing assembly per the service bulletin, and do the modification specified in paragraph (b) of this AD.

Optional Terminating Modification

(b) Do the modification of the upper housing assembly per Part 2 'Modification' of the Accomplishment Instructions of Boeing Alert Service Bulletin 777-57A0011, Revision 1, dated January 25, 2001. Doing this modification ends the repetitive inspections required by this AD.

Alternative Methods of Compliance

(c) An alternative method of compliance or adjustment of the compliance time that provides an acceptable level of safety may be used if approved by the Manager, Seattle Aircraft Certification Office (ACO), FAA. Operators shall submit their requests through an appropriate FAA Principal Maintenance Inspector, who may add comments and then send it to the Manager, Seattle ACO.

Note 3: Information concerning the existence of approved alternative methods of compliance with this AD, if any, may be obtained from the Seattle ACO.

Special Flight Permits

(d) Special flight permits may be issued in accordance with sections 21.197 and 21.199 of the Federal Aviation Regulations (14 CFR 21.197 and 21.199) to operate the airplane to a location where the requirements of this AD can be accomplished.

Incorporation by Reference

(e) The actions shall be done per Boeing Alert Service Bulletin 777-57A0011, Revision 1, dated January 25, 2001. This incorporation by reference was approved by the Director of the Federal Register in accordance with 5 U.S.C. 552(a) and 1 CFR part 51. Copies may be obtained from Boeing Commercial Airplane Group, P.O. Box 3707, Seattle, Washington 98124-2207. Copies may be inspected at the FAA, Transport Airplane Directorate, 1601 Lind Avenue, SW., Renton, Washington; or at the Office of the Federal Register, 800 North Capitol Street, NW., suite 700, Washington, DC.

Effective Date

(f) This amendment becomes effective on May 8, 2001.

FOR FURTHER INFORMATION CONTACT: Stan Wood, Aerospace Engineer, Airframe Branch, ANM-120S, FAA, Seattle Aircraft Certification Office, 1601 Lind Avenue, SW., Renton, Washington 98055-4056; telephone (425) 227-2772; fax (425) 227-1181.

Issued in Renton, Washington, on April 11, 2001.

Donald L. Riggin, Acting Manager, Transport Airplane Directorate, Aircraft Certification Service.